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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/581,997	09/07/2000	Harri Lehtonen	023600-227	7978

21839 7590 11/13/2002

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EXAMINER

JOYCE, WILLIAM C

ART UNIT	PAPER NUMBER
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3682

DATE MAILED: 11/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/581,997

Applicant(s)

LEHTONEN, HARR

Examiner

William C. Joyce

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

This office action is in response to the amendment filed September 5, 2002 for the above identified patent application.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Tuneblom (US Patent 3,722,381).

Tuneblom discloses a vibrating device comprising a shaft (68) having shaft sections (56) attached to both ends of the shaft by a joint, each shaft section supported by bearings (58,60), an eccentric weight (12,14) connected to the shaft, wherein the joint is rigid and adapted to transmit bending moment.

3. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Niklewski (US Patent 5,220,846).

Referring to Figure 3, Niklewski discloses a conventional vibrating device comprising a shaft (7) having shaft sections (4) attached to both ends of the shaft by a joint, each shaft section supported by bearings (30), an eccentric weight (6) connected to the shaft, wherein the joint is rigid and adapted to transmit bending moment.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4, 5, and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuneblom (US Patent 3,722,381) as applied to claims 1-3 above, and further in view of Redinger (US Patent 1,615,233).

Tuneblom does not disclose the joint as having an axial screw or having conical surfaces, but joining two rotary components by the claimed joint was known in the art. For example, the prior art to Redinger disclose a conical joint having an axial screw. It would have been obvious to one of ordinary skill in the art at the time the invention was made to connect the shafts of Tuneblom with a joint having an axial screw and conical surfaces, as taught by Redinger, motivation being to provide a secure and reliable joint between components.

6. Claims 4, 5, and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niklewski (US Patent 5,220,846) as applied to claims 1-3 above, and further in view of Redinger (US Patent 1,615,233).

Niklewski does not disclose the join as having an axial screw or having conical surfaces, but joining two rotary components by the claimed joint was known in the art. For example, the prior art to Redinger disclose a conical joint having an axial screw. It would have been obvious to one of ordinary skill in the art at the time the invention was made to connect the shafts of Niklewski with a joint having an axial screw and conical surfaces, as taught by Redinger, motivation being to provide a secure and reliable joint between components.

7. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuneblom (US Patent 3,722,381) as applied to claims 1-3 above.

Tuneblom discloses the shaft connected by a spline joint but does not disclose the join as having surfaces in the shape of a pyramid. However joining two rotary components by corresponding surfaces was known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to joint the shaft components of Tuneblom with a joint having a joint with surfaces formed as a pyramid and having an axial screw, as is known in the art, motivation being to provide a rigid and reliable joint between components.

8. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niklewski (US Patent 5,220,846) as applied to claims 1-3 above.

Niklewski discloses the shaft connected by a spline joint but does not disclose the join as having surfaces in the shape of a pyramid. However joining two rotary

components by corresponding surfaces was known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to joint the shaft components of Niklewski with a joint having a joint with surfaces formed as a pyramid and having an axial screw, as is known in the art, motivation being to provide a rigid and reliable joint between components.

### ***Response to Arguments***

9. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Note the joint of Entrikin ('614).

- Note the vibrating devices of Johnson ('647) and Soldan ('143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Joyce whose telephone number is (703) 305-5114. The examiner can normally be reached on Monday - Thursday 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci can be reached on (703) 308-3668. The fax phone numbers


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for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

  
William C. Joyce  
November 7, 2002